

Access SRD's SMART Sensor Technology!

- Integrates into Existing Detectors
- Provides Immediate Orthogonality
- Customizable to Any Application
- Order a T&E Kit

Versatile Operational Form Factor

- ✓ Wearable
- ✓ Handheld
- ✓ Distributed
- ✓ Mesh Networked
- ✓ Drone-Mountable

SPECIFICATIONS

Physical Characteristics	SMART Gas Sensor: Dimension: 1.0" Dia x 0.5"H Weight: 0.22 oz (6.28 g)
	Sensor Module: Weight: 3.1 ounces (87.9 g) Dimension: 3.4"L x 3.1"W x 0.8"H
Performance	Detection Range: 22 TICs & 8 CWAs (see Table) Sampling Rate 1 Hz Detection Time (Avg): 23+ sec Alarm Time (Avg): 53+ sec Operating Temp.: 0 to 50°C Humidity: 0 to 80% RH
SMART Sensor	16 Nano-Sensor Array Integrated RH/Temp Sensor Embedded EEPROM w/ AI
Calibration	Auto-Calibration
Pump	12 V DC Input and set at 100 ccm
Power	24 V DC Input (9-36 V DC), 85 mA
Communications	USB

Contact Information

SMART Gas Sensor Licensing



Gas Delivery Products



Gas Testing Services Available



Toll Free: 1-888-390-5234
Email: SMARTSensors@srdcorp.com
www.srdcorp.com



Next-Generation SMART Gas Sensor

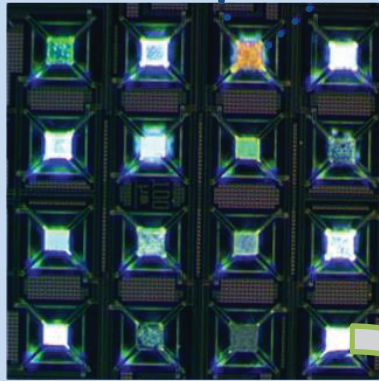
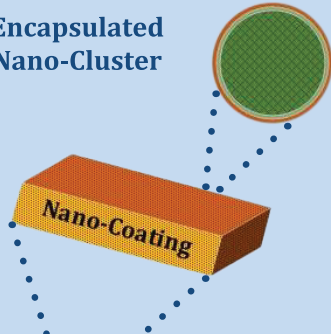


**Advanced Monitoring Against
Impending Chemical Threats**

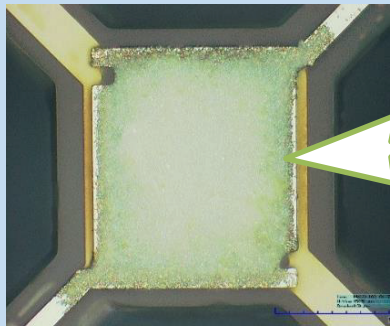


Advanced Nano-Sensor Array (Heart of SMART Sensor)

Encapsulated Nano-Cluster



Array



Single Nano-Sensor

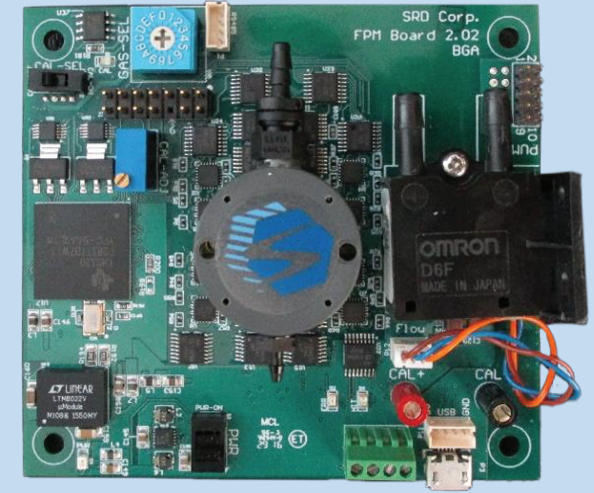
Key Features

- Customizable Nano-Sensor Array
- Artificial Intelligence (AI) Interprets Array
- Rapidly Detect & Identify TICs and CWAs
- Autonomous Operation – 24/7
- No Calibration Required!
- Reusable – 4+ Years Operation Life
- Integrated RH/Temperature Sensor
- “Negation” Sensors – Prevent False Alarms
- SMART Gas Sensor: Customizable Nano-Sensor Array + Embedded Algorithms
- Expandable to Additional TICs, CWAs, Pollutants, other Backgrounds & Applications

Target Gases

No.	Gas	LDL	Detection Time [sec]	Alarm Time [sec]
1	Hydrogen Cyanide	5 (ppm)	15	45
2	Chlorine	0.5 (ppm)	16	45
3	Phosgene	1 (ppm)	22	51
4	Ammonia	50 (ppm)	24	52
5	Sulfur Dioxide	15 (ppm)	17	47
6	Nitrogen Dioxide	0.5 (ppm)	16	46
7	Ethylene Oxide	10 (ppm)	16	47
8	Acrylonitrile	2 (ppm)	13	52
9	Acrolein	0.1 (ppm)	16	55
10	Cyanogen Chloride	0.5 (ppm)	20	53
11	Hydrogen Chloride	10 (ppm)	32	63
12	Formaldehyde	0.75 (ppm)	33	62
13	Hydrogen Sulfide	2 (ppm)	17	48
14	Hydrogen Fluoride	15 (ppm)	16	45
15	Phosphine	1.0 (ppm)	14	43
16	Methyl Chloride	100 (ppb)	20	47
17	Cyclohexane	200 (ppb)	20	47
18	2-Chloroethyl Ethyl Sulfide	100 (ppb)	20	47
19	Methyl Salicylate	0.06 (mg/m ³)	25	50
20	Thiodiglycol	150 (ppb)	20	47
21	Thionyl Chloride	150 (ppb)	20	47
22	Tear Gas (CS)	0.4 (mg/m ³)	25	53
23	Tabun (GA)	0.1 (mg/m ³)	27	54
24	Sarin (GB)	0.1 (mg/m ³)	26	59
25	Soman (GD)	0.1 (mg/m ³)	28	61
26	Cyclosarin (GF)	0.05 (mg/m ³)	40	77
27	Nitrogen Mustard (HN3)	0.06 (mg/m ³)	37	65
28	Sulfur Mustard (HD)	0.3 (mg/m ³)	25	54
29	Lewisite (L)	0.5 (mg/m ³)	28	63
30	VX	0.006 (mg/m ³)	37	65

SMART Sensor Module



- Every Application = Unique Array + AI
- Adaptable for Challenging Applications
- Chemically-Tailored Nano-Sensors
- Library of 200+ Nano-Sensor Recipes
- Coupled w/ AI Algorithms

Test & Evaluation Kit

